October 31, 2007

# **PHASE I- PRELIMINARY REPORT**

## **Town of Acton**

Summary of Conditions and Recommendations for the Repair/Rehabilitation of Town Owned Bridges











Submitted to:



Submitted by:



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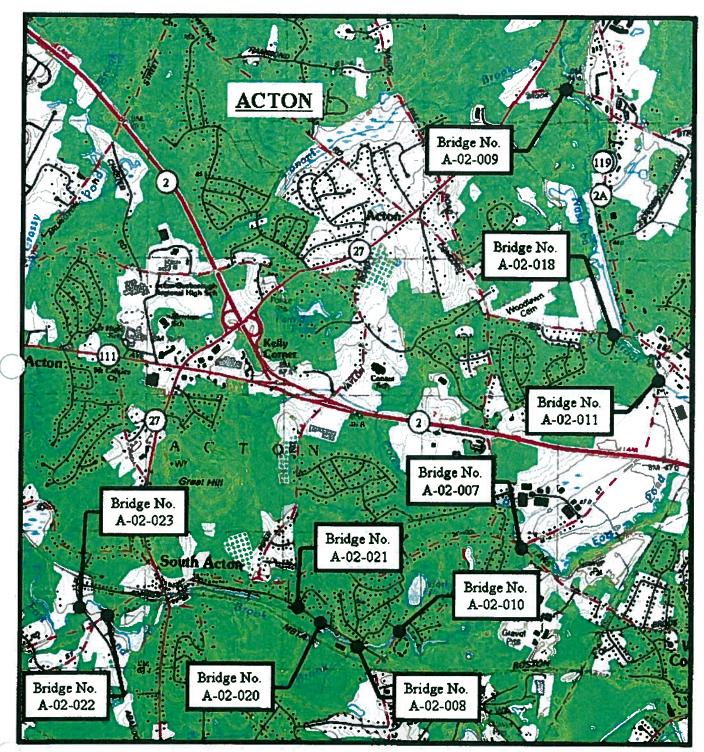
Web Site: www.chashsells.com



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ACTON
Repair and Rehabilitation of Town Owned Bridges



PROJECT LOCUS

Scale: 1:24000



#### I. EXECUTIVE SUMMARY

#### **Background**

The Town of Acton has requested Chas. H. Sells, Inc. (SELLS) to inspect and evaluate ten (10) Town Owned Bridges in the Town of Acton, MA. The bridges include Bridge No. A-02-018 (Concord Road over Nashoba Brook), Bridge No. A-02-011 (Wetherbee Street over Nashoba Brook), Bridge No. A-02-009 (Brook Street over Nashoba Brook), Bridge No. A-02-008 (River Street over Fort Pond Brook), Bridge No. A-02-021 (River Street over Fort Pond Brook), Bridge No. A-02-020 (River Street over Fort Pond Brook), Bridge No. A-02-023 (Martin Street over Fort Pond Brook), Bridge No. A-02-007 (Lawsbrook Road over Fort Pond Brook) and Bridge No. A-02-010 (Parker Street over Fort Pond Brook). The purpose of this project is to develop and implement a maintenance/repair plan in order to extend their service life. The work shall consist of the inspection, evaluation, design and final preparation of construction drawings and documents necessary to complete the assigned project.

#### **Proposed Project**

This project involves the inspection and evaluation of the above mentioned ten (10) bridges in the Town of Acton. The proposed bridges consist of two (2) corrugated steel pipe culvert structures, two (2) corrugated steel pipe arch culvert structures, two (2) corrugated steel deck arch structures, two (2) reinforced concrete box culvert structures, one (1) concrete encased steel beam superstructure and one (1) concrete "T" beam superstructure. This report summarizes the findings of SELLS field inspection and research. The report also identifies and prioritizes needed repairs to these structures and provides a preliminary cost estimate for these repairs.

#### Field Inspection

The bridge structures were inspected between the dates of September 19 and 21, 2007 by Justin Downing and Keith Desroches of SELLS. The equipment used for these inspections included chest waders, hip waders, boat, chipping hammers and assorted measuring devices. The bridge structures were inspected with a hands-on inspection for their conformity with the most current MassHighway Department's Bridge Inspection Reports and to identify those elements that are in need of repair with the goal of extending the service life of these structures.